SECTION 13865B

APPENDIX B - FLOW METERS FLOW METERS INDEX

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Giffels Professional Engineering Project No. SF070003 Issued: 02-19-09

GENERAL FLOW METER TECHNICAL SPECIFICATION SHEET

FLOW METER TYPE: ELECTROMAGNETIC (TYPE EMFM-1) SEE THE FLOW METER SCHEDULE FOR SPECIFIC TECHNICAL REQUIREMENTS.

1. GENERAL:

PROVIDE AN ELECTROMAGNETIC FLOW METER ASSEMBLY COMPLETE WITH ALL AUXILIARY DEVICES, WHICH MEETS ALL OF THE SERVICE CONDITIONS, FLOW PARAMETERS AND CALIBRATION REQUIREMENTS AS INDICATED. THE FLOW METER ASSEMBLY MATERIALS OF CONSTRUCTION SHALL BE FULLY COMPATIBLE WITH THE PROCESS FLUIDS AND THE AMBIENT CONDITIONS. PROVIDE A COMPLETE SPECIFICATION SHEET FOR EACH METER.

TECHNICAL:	
CONSTRUCTION:	WATERTIGHT, GENERAL USE
PROCESS FLUID:	AS SCHEDULED
METER TYPE:	ELECTROMAGNETIC
PROCESS LINE SIZE:	AS SCHEDULED
NOMINAL METER SIZE:	AS SCHEDULED
METER END CONNECTIONS:	FLANGED OR AS SCHEDULED
ANSI BODY RATING:	ANSI CLASS 150
BODY MATERIAL:	STAINLESS STEEL (SUS 304)
BODY LINER:	TEFLON PFA OR PFTE
ELECTRODE MATERIAL:	STAINLESS STEEL (SUS 316L)
EARTH RING:	STAINLESS STEEL (SUS 316)
MAXIMUM ALLOWABLE METER	0.1 PSI AT MAXIMUM DESIGN FLOW
PERMANENT PRESSURE DROP:	
ACCURACY:	+/- 0.5% OF RATE
TRANSMITTER OUTPUT	4 TO 20 mADC ANALOG RATE
SIGNAL:	
FLOW METER CALIBRATION	AS SCHEDULED
RANGE:	
	120 VAC / 10 / 60 Hz.
-	
	SELF-CONTAINED AT METER
	NOT REQUIRED
INSTRUMENT GROUNDING:	PROVIDE PER MANUFACTURER
	CONSTRUCTION: PROCESS FLUID: METER TYPE: PROCESS LINE SIZE: NOMINAL METER SIZE: METER END CONNECTIONS: ANSI BODY RATING: BODY MATERIAL: BODY LINER: ELECTRODE MATERIAL: EARTH RING: MAXIMUM ALLOWABLE METER PERMANENT PRESSURE DROP: ACCURACY: TRANSMITTER OUTPUT SIGNAL: FLOW METER CALIBRATION RANGE: FLOW METER POWER REQUIREMENTS: CONVERTOR: LOCAL ANALOG METER:

3. MANUFACTURER:

- A. ENDRESS & HAUSER PROMAG SERIES
- B. ABB MAGMASTER SERIES
- C. EMCO MAGFLO SERIES
- D. BAILEY, FISCHER + PORTER 10DX SERIES
- E. KROHNE AQUAFLUX SERIES

Giffels Professional Engineering Project No. SF070003 Issued: 02-19-09

GENERAL FLOW METER TECHNICAL SPECIFICATION SHEET

FLOW METER TYPE: AVERAGING PITOT TUBE METER - D.P. TRANSMITTER (TYPE APFM-1) SEE THE FLOW METER SCHEDULE FOR SPECIFIC TECHNICAL REQUIREMENTS.

1.	GENERAL:			
	PROVIDE AN AVERAGING PITOT TUBE ASSEMBLY COMPLETE WITH ALL AUXILIARY DEVICES			
	WHICH MEETS ALL OF THE SERVICE CONDITIONS, FLOW PARAMETERS AND CALIBRATION			
	REQUIREMENTS AS INDICATED. THE FLOW METER ASSEMBLY MATERIALS OF			
	CONSTRUCTION SHALL BE FULLY COMPATIBLE WITH THE PROCESS FLUIDS AND THE			
	AMBIENT CONDITIONS. PROVIDE ORIFICE SIZE AND D.P. RANGE CALCULATION SHEET.			
2.	TECHNICAL:			
	PROCESS FLUID:	AS SCHEDULED		
	MOUNTING:	1" NPT WELD-O-LET		
	TD ANGMITTED.	1. ROSEMOUNT 3051S		
TRANSMITTER:	TRANSMITTER:	2. ENDRESS & HAUSER – PMD70		
3.	MANUFACTURER:			
	A. ROSEMOUNT 485 ANNUBAR			

Giffels Professional Engineering Project No. SF070003 Issued: 02-19-09

GENERAL FLOW METER TECHNICAL SPECIFICATION SHEET

FLOW METER TYPE: THERMAL DISPERSION (TYPE TDFM-1)
SEE THE FLOW METER SCHEDULE FOR SPECIFIC TECHNICAL REQUIREMENTS.

1. GENERAL:

PROVIDE A THERMAL DISPERSION FLOW METER ASSEMBLY COMPLETE WITH ALL AUXILIARY DEVICES, WHICH MEETS ALL OF THE SERVICE CONDITIONS, FLOW PARAMETERS AND CALIBRATION REQUIREMENTS AS INDICATED. THE FLOW METER ASSEMBLY MATERIALS OF CONSTRUCTION SHALL BE FULLY COMPATIBLE WITH THE PROCESS FLUIDS AND THE AMBIENT CONDITIONS. PROVIDE A COMPLETE SPECIFICATION SHEET FOR EACH METER

2. TECHNICAL:	TECHNICAL:	
PROCESS FLUID:	AS SCHEDULED	
METER TYPE:	THERMAL DISPERSION	
MOUNTING:	3/4" NPT	
PROCESS WETTED PARTS:	316 STAINLESS STEEL	
MAXIMUM PRESSURE DROP:	0.1 PSI AT MAXIMUM DESIGN FLOW	
ELECTRONICS HOUSINGS:	NEMA 4, FACTORY MUTUAL APPROVAL.	
FLOW OUTPUT SIGNAL:	4 TO 20 mADC LINEAR ANALOG RATE IN SCFM.	
ACCURACY:	+/- 1% OF FULL SCALE.	
REPEATABILITY:	+/- 1% OF FULL SCALE.	
CALIBRATED RANGE:	AS SCHEDULED	
POWER INPUT:	120 VAC, 60 HZ.	
INSERTION LENGTH:	PROVIDE "U" LENGTH (PROCESS CONNECTION TO PROBE TIP) PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.	

3. MANUFACTURER:

A. FLUID COMPONENTS, INC. – MODEL ST98B-CA FLEX MASS

END OF SECTION

Revision History		
Date	Rev. No.	
Α	0	
В	0	
С	0	
D	0	
E	0	
F	0	
02-19-09	0	

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